T6 Appendix C, Page 1-2: The sixth bullet on the page states that the bald eagle is known to occur within the project area, but no nests were found. It should state, however, that a bald eagle nest territory and winter roosts occur within the Significant Impact Area for Annual PM10, and another nest territory occurs within a mile of the proposed transmission line.

U6 Appendix C, Page 2-14, 2.2.8, Conductors and BFD: This section states that, "Annual monitoring of the new lines would be conducted to determine if the lines are a significant impact to waterfowl and special-status birds that forage and nest in the area." If monitoring is necessary to determine if there are significant impacts, it is unclear how the DEIS can make repeated statements that there are no significant impacts, for example on page S-3. Annual monitoring would not capture mortality if it is occurring in all seasons, especially during migration of birds into and out of the basin. The Department recommends that initially, monitoring should be during peak migration and during the nesting and fledgling periods.

V6 Appendix C, Page 4-5, Wetlands: The first paragraph mentions marsh habitat was observed "approximately 2,000 feet south of the water supply wells" and the second paragraph identifies a marsh "approximately 1,200 feet southeast of the Babson well." It is not clear if these two references are describing the same marsh, but utilize a different point of reference, or if they are different. The map in Figure 4.1 only shows one wetland in the vicinity of the supply wells. The Department recommends the marsh or marshes be clearly identified to avoid confusion.

W6 Appendix C, Page 4-5, Wetlands: The common name for *Catoptrophorus semipalmatus* should be willet, not wouldet.

X6 Appendix C, Page 5-7, Avian Collision: The last sentence of the second paragraph states "If monitoring results show that bald eagles are foraging at the water supply reservoir, remedial actions may be implemented as described in Appendix E." It is our understanding that the water supply storage for the proposed air-cooled power generation facilities would be fully enclosed in water tanks, thereby eliminating any chance of attracting birds. Additionally, there is no mention of an open water supply storage reservoir within Appendix E. The Department recommends this statement be corrected for the proposed action.

Y6 Appendix C, Page 5-9, Survey Results: With regard to the third sentence, while the fish observed did resemble red shiner, observations were made from a distance making positive identification impossible. Other similar minnow species, including the blue chub and tui chub, are more likely to occur in the area. Therefore, it would be more appropriate to identify these as species in the family Cyprinidae, unless identification is confirmed.

Z6 Appendix C, Page 5-10, Project Impacts, Improbable Worst-Case Connection; Page 5-11, Avoidance and Minimization Efforts; Page 6-1, Section 6.2, Lost River and Shortnose Suckers; and Appendix F: It is our understanding that the August/September Babson well test at 6,800 gallons per minute for 30 days affected two nearby shallow aquifer wells, yet there is no mention of this effect or possible explanations for the effect, in the biological assessment or Appendix F. It appears reasonable to assume that pumping at the proposed level of approximately 300 gallons

per minute would not have a noticeable effect on the shallow aquifer or surface water, when compared to the month-long test at 6,800 gallons a minute. However, the Department recommends that any effects of the well test be clearly stated and evaluated, including any effects to other wells and their probable or possible causes.

28A7 Appendix C, Page 6-1, Bald Eagle: The second paragraph states "Annual monitoring of the new lines would be conducted to determine if the lines cause substantial effects to the bald eagle populations." Annual monitoring would not capture mortality if it is occurring in all seasons, especially during migration of bald eagles into and out of the basin. The Department, therefore, recommends that initially, monitoring occur during peak migration and during the nesting and fledgling periods.

B7 Appendix C, Page A-8, Monitoring Procedures: Monitoring procedures for re-vegetation and habitat improvement efforts are identified as being conducted "the year following each seeding." However, there are no long term monitoring efforts identified to ensure success. It is unlikely that a single monitoring effort one year after each re-vegetation and habitat improvement effort will be sufficient to determine the success of the effort. The Department recommends the proposed action include long term monitoring (for example, every three years until vegetation is established), to ensure re-vegetation and habitat improvement efforts are successful. If determined unsuccessful, the potential cause should be evaluated and additional efforts implemented, until they are deemed successful.

C7 Appendix C to the Biological Assessment, Page 1, Introduction: The description of the project area in paragraph 1 describes eagle use at McFall Reservoir, but does not include the eagle use at Smith Reservoir, or discuss the bald eagle winter roosts. Since these bald eagles use areas within the Significant Impact Area for Annual PM10, the effects from air emissions on bald eagles should be analyzed and discussed in the document.

D7 Appendix C to the Biological Assessment, Section 2.2, Contaminants of Potential Ecological Concern: The statement was made that "because the primary deposition area for air emissions is outside the Energy Facility site, the deposition from air emissions is not expected to overlap with the process wastewater application area." However, there is no explanation of how the primary deposition area was determined. The Department recommends you more clearly define the amount of aerial deposition expected at the Energy Facility (< some %), at the "primary deposition site," and the expected fate of the balance of the Contaminants of Potential Ecological Concerns (COPECs).

E7 Appendix C to the Biological Assessment, Section 2.2.1, Air Emissions: This section, and Table 1, identifies estimated annual emissions of hazardous air pollutants (HAP). However, it is unclear if the constituents and concentrations of HAPs in the emissions are based on what is typically observed with this type of process. Additionally, the predominant winds identified by the windrows in Figure 3.7-1of the DEIS, does not appear to support Table 1. The Department recommends the source of these assumptions, and how conservative they are, be identified.

F7

G7 The assumption is also made that since organic compounds are in the vapor phase, they will not pose an ecological risk. Since some organic pollutants may also precipitate out and eventually be deposited in terrestrial and aquatic environments, the Department recommends a model showing deposition of these organic HAPs be presented, if possible, or additional information be provided to confirm these organic compounds will remain in the vapor phase under local environmental conditions and will not impact areas beyond those already identified. To ensure impacts of the project are fully evaluated, the action area should extend to all locations where effects may occur, including any deposition areas beyond the immediate vicinity of the facility.

H7 Additionally, this section is not clear on why a radius of 6 miles was chosen for the evaluation of aerial deposition, or how the area with significant impacts was determined. The Department recommends the assumptions that went into the model estimate be identified, and any potential impact areas be evaluated to clearly show their significance.

I7 The generic reservoir modeled assumed a depth of 20 feet. However, McFall Reservoir, Alkali Lake, and other surface waters in the area are considerably shallower than 20 feet, with average depths less than 5-6 feet deep. McFall and Harpold generally go dry on an average year and Smith is drawn down to a small pool. It seems that this discrepancy would lead to an underestimate of resulting water concentrations. The Department recommends water bodies be identified and the model adjusted to more accurately represent existing conditions. Also this section addresses McFall reservoir but doesn't mention other reservoirs within and adjacent to the Significant Impact Area for Annual PM10 (Figure 1). Specifically, the document should discuss Smith Reservoir and Harpold Reservoir.

The literature-derived deposition rate of 0.02 m/s was used as an assumption to calculate soil and water concentrations. However, it is not clear if this is a standard assumption for screening level assessments or whether the rates are typically associated with the COPECs. The Department recommends that this be clarified.

J7 Appendix C to the Biological Assessment, Section 2.2.2, Process Wastewater Application: It is not clear how the predicted wastewater concentration (PWC), and "predicted reject water concentration" was calculated. The Department recommends additional clarification be provided and information also be provided to confirm that using the 1.954 factor will provide an accurate, or at least reasonably conservative, estimate of the of the actual wastewater concentration.

K7 Appendix C to the Biological Assessment, Section 2.4.2, Process Wastewater Application: Process water runoff and leaching pathways are not clear, and additional information is needed to determine that runoff and leaching are not pathways for surface and groundwater contamination. The Department recommends pathways, such as type of irrigation, depth to groundwater, and other pertinent information be provided in the FEIS.

L7 Appendix C to the Biological Assessment, Section 3.4, Birds and Mammals, Model: This section makes the assumption that dermal and inhalation exposure is negligible because "data necessary to estimate dermal exposure are generally not available for wildlife," and "methods and data necessary to estimate wildlife inhalation exposure are poorly developed or generally not

available." Although there may not be methods available to estimate dermal and inhalation exposure in birds, no information was provided to support the assumption that exposure by these routes are negligible. Rather, it seems intuitive that inhalation exposure would be significant for organisms that occupy habitats near aerial discharge sites. In completing the Biological Opinion for this project, the Fish and Wildlife Service (FWS) will be required to use the best science available, and to give the benefit of the doubt to listed species where data are lacking. The Department, therefore, recommends your analysis take this into account. It may be possible to use other data as a surrogate, such as mammalian inhalation data and exposure estimates, to determine risk to birds from this route.

28M7 Appendix C to the Biological Assessment, Section 3.4, Birds and Mammals, Assumptions, Exposure Point Concentrations: Although overall exposure estimates may be low, this section identifies the use of generic surface water values for McFall Reservoir. This may be inappropriate since this reservoir, as well as others in the area, are relatively shallow and may not fit the generic values. Therefore, the Department recommends the model be adjusted to more accurately assess exposure.

N7 Additionally, waterfowl in the basin are a major source of food for bald eagles, particularly in the winter months. Therefore, the Department recommends that possible uptake by waterfowl also be evaluated for seasonal differences in exposure.

O7 Appendix C to the Biological Assessment, Section 4.4, Birds and Mammals: Several compounds were identified as exceeding the screening level criteria based on background levels. If these levels are accurate, it is cause for concern, and the Department would like to identify the sources of these contaminants. However, it is unclear as to how well these "background" values truly represent the site. Section 2.2.3 indicates use of background values for Klamath County that were reported by the U.S. Geological Survey, and values from Washington State were used when Klamath County values were not available. The Department recommends additional clarification be provided, and that the information be specific to the area that would be affected by the project.

P7 Appendix C to the Biological Assessment, Table 5: "Exposure Parameters for Wildlife receptors for Bald Eagles," under Major Food Items column, it is assumed that the diet for bald eagles in the area is 100 percent fish. This assumption is not accurate. The primary diet in the area, especially for wintering populations is carrion, small mammals, and waterfowl. Fish may be a higher component of the diet during the nesting season.

R7 Appendix C to the Biological Assessment, Table 11: The generic reservoir modeled assumed a depth of 20 feet. Smith, McFall, and Harpold reservoirs are all shallower than 20 feet. Using the generic mixing levels for these reservoirs may likely change the bioaccumulation values and exposure estimates for bald eagles. The Department recommends water bodies be identified and the model adjusted to more accurately represent existing conditions.

S7 Appendix E to the Biological Assessment, Page 3-1, Monitoring for Bird Collisions: The last sentence states "The FWS and ODFW would be notified if any bald eagles or other special status

birds are found dead from collisions during the dead bird searches." The Department recommends this sentence be modified to reflect that the FWS and ODFW would be notified about all dead or injured birds and other animals found during monitoring efforts, so that problems are detected and corrected as early as possible. Any birds or other animals found dead or injured in relation to the power lines that are not associated with scheduled monitoring efforts should also be reported to the FWS and ODFW. We further recommend the second sentence of the second to last paragraph, of the following subsection, Conducting Dead Bird Searches, also be modified. The FWS maintains records of bird strikes with transmission lines, and native migratory birds are protected under the Migratory Bird Treaty Act.

Appendix E to the Biological Assessment, Page 4-3, Estimate of Total Collision (ETC), and Section 5: The last paragraph discusses the estimate of total collisions in relation to "significance criteria set forth by the FWS." The FWS does not set "significance criteria." However, if through consultation under the Endangered Species Act FWS exempts take of federally endangered or threatened species in our biological opinion, consultation must be reinitiated if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not considered in the opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in the opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action.

Under the Migratory Bird Treaty Act, prohibited actions include taking, killing, or possessing migratory birds unless permitted by suitable regulations adopted by the Secretary of Interior. Currently regulations only authorize issuing permits for intentional take of migratory birds for scientific research, education, and depredation control, and do not include the issuance of permits for incidental take. Therefore, the Department recommends the proponent work closely with the USFWS to avoid take of birds protected under the Migratory Bird Treaty Act and notify them of any bird collisions.

If you have any questions regarding these comments, please contact to Leonard LeCaptain, United States Fish and Wildlife Service, in Klamath Falls at (541) 885-8481, or Don Hoffheins, Bureau of Land Management, in the Klamath Falls Resource Area Office at (541) 885-4105.

We appreciate the opportunity to comment.

Sincerely,

Preston A. Sleeger
Regional Environmental Officer